## Green Buildings in Alexandria: Policy Recommendations Appendix #2

# **Greening the Metropolitan Washington Region's Built Environment**

A Report to the Metropolitan Washington Council of Governments

Board of Directors—Final Report, December 12, 2007.

KEY RECOMMENDATIONS AND RATIONALE

**Recommendation 1: Preferred Green building Rating Standards** 

Establish LEED as the region's preferred green building rating system for new commercial construction and high-rise residential projects. LEED includes several green building rating systems that apply to specific building types, including, but not limited to, LEED for New Construction (LEED-NC), LEED for Core and Shell (LEED-CS), and LEED for Commercial Interior (LEED-CI) rating systems. LEED building guidelines are also available or are in development for specific commercial project types (schools, health care, retail, existing buildings, neighborhoods, etc.) and should be evaluated for applicability as appropriate. In the future, the Intergovernmental Green Building Group will provide formal recommendations for green building standards in these sectors, but in the interim local governments are encouraged to consider available standards for these building types.

The following jurisdictions in the COG region use LEED as a guide and rating system for public and/or private projects: Arlington County, City of Alexandria, District of Columbia, Fairfax County, City of Gaithersburg, City of Greenbelt, Montgomery County, Prince George's County, City of Leesburg, Prince William County, City of Rockville, Takoma Park, and Falls Church.

#### Rationale

- LEED is the most recognizable and recognized green building guidance and rating system in use nation-wide.
- LEED is the system preferred by metropolitan Washington industry representatives.
- LEED is currently being used by many local governments in the metropolitan Washington region for public and private construction. There are about 487 LEED registered buildings in the metropolitan Washington region.
- GSA finds that the "USGBC's LEED rating system continues to be the most appropriate and credible sustainable building rating system available for evaluation of GSA projects."
- LEED has clearly defined standards and outlines specific requirements for compliance.
- LEED provides a rigorous, third party certification process.

• LEED provides on-going training as well as local technical support.

The policy rationale behind **Recommendation 1** is that the region will benefit from a consistent, rigorous, and widely understood standard for green building.

Recommendation 2: Green Building Standard for Local Government Public Projects

Establish LEED Silver certification as the goal for all local government facilities constructed in the Washington Metropolitan Region.

The appropriate LEED rating system should be used for each specific type of public project, and should incorporate at least 4 credits as outlined by the COG Regional LEED Certified standard (see Recommendation 3) for private commercial and high-rise residential development. Public buildings should also pursue the Energy Star label as part of their ongoing performance.

#### Rationale

- LEED Silver is the entry level green building high performance standard among municipal leaders in the nation. Cutting edge municipalities are moving toward LEED Gold for public buildings.
- There are nearly 40 projects in the DC region that have achieved LEED ratings of Certified or higher.
- According to industry representatives, the LEED Certified rating –the baseline LEED ranking can easily be achieved in the Metropolitan Washington region.
- A growing number of builders in the region strive for LEED Silver as part of their competitive strategy.
- Local government should set a higher bar for building sustainability as an example of their commitment to achieving a sustainable and energy efficiency environment.
- Currently about 10 COG member governments participate in EPA's ENERGY STAR program.
- Energy Star and LEED programs complement one another. Energy Star products can be used in LEED buildings. Energy Star tools, such as Portfolio Manager, can be used to measure a LEED rated building's ongoing energy performance.
- LEED recently enhanced the energy performance requirements. (Two Energy Optimization credits are now required on all projects).

The policy rationale behind **Recommendation 2** is that programs with strong energy conservation and energy efficiency components provide the region with the greatest opportunities for overall economic and environmental sustainability. Recommendation 2 supports making public facilities models for best green building practices.

Recommendation 3: Develop "COG Regional Green Standard" for Private Development

Establish the COG Regional LEED Certified standard for **private commercial and high-rise residential development**.\*

**COG Regional LEED Certified** is defined as achieving a LEED Certified rating with at least 4 credits from the following:

- (1) Additional EA1 credits -- (Energy Optimization) credits;
- (2) SS7.1 Heat Island, Non-Roof;
- (3) SS7.2 Heat Island, Roof;
- (4) EA 2 On-site Renewable Energy;
- (5) EA6 Green Power;
- (6) MR2.2 75% Construction Waste Management;
- (7) SS 6.1 Stormwater Design Quantity Control; and/or
- (8) SS 6.1 Stormwater Design Quality Control.

Focusing the LEED certification using these credits directly addresses the critical environmental issues facing the Metropolitan Region including energy efficiency, global warming, heat island impacts, solid waste management stormwater management, and Chesapeake Bay protection.

\*Review and revise COG Regional LEED Certified recommendation no later than 2012 with the goal of increasing the standard in future years.

#### Rationale

- The metropolitan Washington region is diverse, with urban and non urban environments.
- A LEED Certified rating is easily attained in the region due to local expertise and services.
- The USGBC is currently developing criteria to make documentation less onerous in recognition of concerns regarding commissioning and documentation costs.
- The LEED Certified rating allows maximum flexibility in choosing environmental components for cost effective implementation.
- There are nearly 40 buildings in the region that have achieved LEED ratings of Certified or higher.

The policy rationale behind **Recommendation 3** is that the region will benefit from establishing a region specific standard that focuses on environmental issues of regional concern (Chesapeake Bay protection, greenhouse gas emission reduction, and waste management) and respects the diversity of the region's urban and non-urban environments.

Recommendation 4: Education COG shall collaborate and partner with the private development community, nonprofit organizations, federal programs, educational institutions, financial institutions, and other interested parties to ensure green building goals are achieved to maximize opportunities for innovation in the region, and to optimize outreach and educational opportunities. One means of implementing this goal is an annual regional green building conference that includes all stakeholders – public, private, and community.

#### Rationale

• Jurisdictions have successfully pioneered green building programs. They have actively involved the public and private sectors, nonprofit organizations, and financial institutions in the

development and implementation of green building activities. Community action and market development create jobs and are vital to the success of green building.

The policy rationale behind **Recommendation 4** is to promote and support green building innovation in the private sector through incentives, regulatory mechanisms, and information sharing.

### Recommendation 5: Implement Actions to Insure the Success of the Regional Green Building Policy

- Local governments should use the IGBG Summary Report and Technical Report as a reference guide in developing and implementing Green Building initiatives;
- Continue further work to streamline the implementation of LEED, including working with the USGBC on a regional portfolio standard and other ways to helping implementation of LEED to be more efficient.
- Develop efforts to train local government staff and facility managers in green building design and management, including a monitoring and tracking recommendation on the numbers, types and certification level of green buildings.
- Develop quantification of the benefits of wide-spread implementation of the green building policy on energy use, greenhouse gas reduction, and other measures between now and 2030.
- Develop regional guidance for green building standard for the residential sector, schools, hospitals, existing buildings, and major renovations.
- Develop regional guidance on Energy Star as a performance measure for Green Building.
- COG should formalize a **Green Building Program within the Department of Environmental Programs** to support green building policy development, education, and regional coordination. The Green Building Program should coordinate with existing COG programs (Energy, Climate Change, Water Quality, Air Quality, Regional Growth and Development, Housing, Procurement, etc).

#### Rationale

- Widespread regional implementation will insure a level playing field for the private sector.
- Collaboration with the US Green Building Council on streamlining implementation of the LEED certification process should help insure wider acceptance of green building policies and promote efficient implementation.
- Education and training are essential for local government personnel to help speed implementation of green building policies, including those for local government facilities.
- Computation of the benefits of green building will provide reinforcing data supporting the regional green building policy.
- COG's Department of Environmental Programs has the lead responsibility for environmental issues including air, water, energy, climate change, green building and solid waste. The key feature of green buildings is the integration of the various environmental media and sustainability practices in combination with traditional development policies, housing and procurement.

The policy rationale behind **Recommendation 5** is to promote cross-sector collaboration that supports regional goals for green building, environmental conservation, climate protection, and growth of a regional green economy.

#### Conclusion

Metropolitan Washington faces an unprecedented period of opportunity for developing green building practices and markets. As the region faces many challenges related to air and water quality and climate change, coordinated public policies that promote green building will help overcome those issues while enabling innovators to take advantage of emerging economic opportunities.

LEED currently offers the most reliable and widely understood system for guiding and certifying green commercial projects. ENERGY STAR energy performance guidelines and measurement tools are a valuable accompaniment.

National green building codes, currently in development, will offer a viable option for raising base environmental performance of all buildings, while LEED will continue to push toward high performance. Regional leaders face the unenviable task of coordinating such standards in a tri-state area with varying policies.

The District of Columbia has already stepped up to this challenge by establishing a process for reviewing and updating codes to support green building. In-depth analysis and evaluation will help determine how green building standards should be applied to small-scale residential projects, affordable housing, schools and existing and historic projects.

As green building guidelines and incentives evolve nationally, COG members will need to follow developments closely. Unlike cities such as Seattle, Portland, and Austin, utilities in metropolitan Washington are privately owned, meaning the region's leaders will need to explore alternative options for funding-related incentive tools.

Green building policies and initiatives will be most effective when they are applied with complementary low impact development (LID), smart growth, and community development practices, and in coordination with COG's existing environmental initiatives.

Green building is a vital part of an integrated, coordinated approach to regional sustainable development and environmental stewardship. Most notably, opportunities for integration of green building policies with the region's new climate change initiative remain to be explored.

Building construction, management, and disposal practices have not been well tracked or analyzed at the regional scale. A quantitative tracking and evaluation system for green building in the region will help COG members' measure progress and meet goals for improving the region's water, air, and land resources. Further analysis can also assist in creating targets for energy conservation and carbon dioxide (CO2) emission reductions.

National experience indicates that the best and strongest municipal efforts for green building involve strong leadership, empowered staff, and strong engagement on the part of the private sector, education institutions, and nonprofit organizations. As the metropolitan Washington region moves from public policy toward an integrated regional approach, such partners will have to be a vital part of the regional conversation.

All will have to be engaged in an ongoing process of education and information sharing as we move toward best green building practices in the region.

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